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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,187

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Marc-Michael Meinecke

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EXAMINER

BRAINARD, TIMOTHY A

ART UNIT

PAPER NUMBER

3662

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DELIVERY MODE

05/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/577,187	Applicant(s) MEINECKE ET AL.	
	Examiner TIMOTHY A. BRAINARD	Art Unit 3662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. US Pub 2003/0179128 is used as an English translation for WO 0231529.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 26, 28-30 and 40-43 are rejected under 35 U.S.C. 102(e) as being described by Voles 6888492. Voles teaches (claim 26 and 40) a measuring device for measuring a distance between the measuring device and at least one object and measuring a speed difference between the measuring device and the at least one object (abs and col 1, lines 10-25), comprising: an emission device adapted to send a transmission signal that includes at least two signal portion sequences, each of a first signal portion sequence and a second signal portion sequence including at least two temporally alternating signal portions, at least two signal portions of a signal portion sequence differing in frequency by one differential frequency, wherein the differential frequency of the first signal portion sequence differing from the differential frequency of the second signal portion sequence (fig 1 and col 1, lines 10-48), (claim 28 and 41) a reception device adapted to receive a reflection signal of the transmission signal reflected by the at least one object (abs), (claim 29 and 42) a mixer adapted to mix the

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first signal portion sequence with a portion of the first signal portion sequence of the reflection signal reflected by the at least one object to form a first mixed signal (fig 6, item 17), (claim 30 and 43) an evaluation device adapted to ascertain frequencies of the first mixed signal (col 5, lines 58-68).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 27, 31-39, and 44-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voles as applied to claim 26 above, and further in view of Mende et al (WO 0231529). Mende teaches (claim 27 and 52) the measuring device is adapted to be arranged in a motor vehicle (para 6), (claim 31 and 44) the evaluation device is adapted to determine the distance between the measuring device and the at least one object as a function of the frequencies of the first mixed signal (para 15), claim 32 and 45) the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of frequencies of the first mixed signal (abs and para 15), (claim 33) the mixer is adapted to mix the second signal portion sequence with a portion of the second signal portion sequence of the reflection signal reflected by the at least one object to form a second mixed signal (par a15 and 16), (claim 34 and 45) the evaluation device is adapted to ascertain the one frequencies of the second mixed signal (para 16), (claim 35 and 47) the evaluation device is

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adapted to determine the distance between the measuring device and the at least one object as a function of the one of the measured frequency and (b) the frequencies of the first mixed signal and of a dominating frequency of the second mixed signal (para 16 and 17), (claim 36 and 48) the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of the one of the measured frequency and the frequencies of the first mixed signal and of the one of the measured frequency and the frequencies of the second mixed signal (para 16 and 17), (claim 37 and 49) the evaluation device is adapted to determine a difference between a phase of the first mixed signal and a phase of the second mixed signal (abs), (claim 38 and 50) the evaluation device is adapted to determine the distance between the measuring device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal, (claim 39 and 51) the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal (para 16-18). It would have been obvious to modify **Voies** to include the evaluation device is adapted to determine the distance between the measuring device and the at least one object as a function of the frequencies of the first mixed signal, the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of frequencies of the first mixed signal, the mixer is adapted to mix the second signal portion sequence with a portion of the second signal portion sequence of the reflection signal reflected by the at least one object to form a second

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mixed signal, the evaluation device is adapted to ascertain the one frequencies of the second mixed signal, the evaluation device is adapted to determine the distance between the measuring device and the at least one object as a function of the one of the measured frequency and (b) the frequencies of the first mixed signal and of a dominating frequency of the second mixed signal, the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of the one of the measured frequency and the frequencies of the first mixed signal and of the one of the measured frequency and the frequencies of the second mixed signal, the evaluation device is adapted to determine a difference between a phase of the first mixed signal and a phase of the second mixed signal, the evaluation device is adapted to determine the distance between the measuring device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal, the evaluation device is adapted to determine the speed difference between the measuring device and the at least one object as a function of the difference between the phase of the first mixed signal and the phase of the second mixed signal because each is one of multiple method of determining the distance and velocity of an object with no new or unexpected results. It would have been obvious to modify **Voies** to include the measuring device is adapted to be arranged in a motor vehicle because it is one of multiple applications of a well know system with no new or unexpected results.

Response to Arguments

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4. Applicant's arguments filed 2/20/2009 have been fully considered but they are not persuasive. Applicant argues that Voles does not identically disclose or even suggest the differential frequency of the first signal portion sequence differing from the differential frequency of the second signal portion sequence.

5. Response: Col 5, lines 1-50 teaches sending 4 frequency monopulses, when sending the first monopulse and the fourth monopulse followed by the second and third monopulse the differential frequency of the first signal portion sequence differs from the differential frequency of the second signal portion sequence.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY A. BRAINARD whose telephone number is (571) 272-2132. The examiner can normally be reached on Monday - Friday 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. A. B./
Examiner, Art Unit 3662

/Thomas H. Tarcza/
Supervisory Patent Examiner, Art Unit 3662